



# Getting ready to RoboRave

March 1, 2018

Students across Northern New Mexico got to grips with robotics as they took part in the 2018 RoboRave competition in Española March 3.

This year, 59 teams from elementary to high school age have been testing their teamwork and critical thinking skills as they built and prepared their robots to take part in nine different challenges including navigating a maze, following a line, and jousting.

Fanny Castillo, principal at Abiquiu Elementary has been helping her students compete since 2014, and this year 24 students in five teams from her school's robotics club took part.

"We started planning the robotics club last semester, and started recruiting students in January. Since then, students have been gathering to build and program the robots," says Fanny.

For the maze challenge, students design build and program a robot that can travel on a predetermined route, going forward and making turns at the right times to stay on the course. In jousting, the students' robots have to follow a line and carry a knight with a lance (a water bottle with a stick attached) that can knock over their opponent's 'knight'.

As well as learning and applying math concepts such as turns and rotations, the students develop a range of other skills. "Students develop social skills. They also learn how to work in teams, and by working together we accomplish a lot more. They also develop self-esteem when they make small accomplishments," says Fanny.

"They enjoy "playing" with the robots during the programming. Students also like the competition aspect of it. They start competing against their own classmates, trying to complete the mazes faster than anybody else."

As well as the competition in Española, the Abiquiu teams are hoping to take part in the larger RoboRave International event in Albuquerque in May, and are working on fundraising to make sure the robotics club continues to thrive.

"All the activities we do to make it to RoboRave International bring the whole community together to help," says Fanny. "We have fundraising dinners, and online fundraising that get hundreds of people involved in this project."

*In addition to Los Alamos National Laboratory and Los Alamos National Security, LLC, other supporters of the RoboRave and Northern New Mexico Science Showdown include: Inquiry Facilitators, Northern New Mexico College, Northern New Mexico College Foundation, Century Bank, Twirl, Explora, the Rio Grande Sun and the Española Teen Center.*

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